

# Section 16 Federal Water Planning and Development

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# 16

## Federal Water Planning and Development

### 16.1 Introduction

Federal water planning and development activities have changed considerably over the years. This section discusses many of the federal programs available to assist with water resources development and planning. With this information, it is possible to develop better interagency and local working relationships.

### 16.2 Background

Federal water use, planning, development and regulation are an integral part of the basin plan. The federal role in funding water resources programs is decreasing while its regulatory role is increasing. As a result, the state is being called on to fill the void, particularly when financial assistance is required. Added costs are also required of the state to carry out federally mandated programs. Federal mandates may influence the ability of the state to respond to local requests.

**Twelve federal agencies have water resources planning and development missions. Some of these agencies have increased their roles in the Kanab Creek/Virgin River Basin area; other agency roles have decreased.**

### 16.3 Federal Concerns

Four concerns were identified in the *State Water Plan* by federal agencies. These were 1) reserved water rights, 2) interrelated planning and development, 3) stream and riparian habitat loss and 4) water rights filings.

Progress has been made on most of the concerns. Most notable is the completion of the Virgin River Cooperative Study with the cooperation of every agency and entity in the area with water resources related interests.

#### 16.3.1 Policy Issues and Recommendations

Recently, the issue of interrelated planning and development surfaced.

### **16.3.2 State, Federal and Local Coordinated Planning**

**Issue** - There is a need for representatives of state and federal agencies and local entities to coordinate their water and water-related planning, particularly those having management authority over land and water resources.

**Discussion** - The natural resources of this basin are vitally important to every individual, agency or organization involved in their development and use. Consequently, plans for development and use of available resources should be carefully evaluated and coordinated among all appropriate entities.

Land owners, state and federal land managers and administrators of other federal, state and local agencies should strive for acceptable compromises and work toward a common goal.

The needs of an expanding population should be the major consideration, including water to drink and land to develop. Other important water-related considerations should include preserving areas for recreation and leisure activities and water-related wildlife and habitat for the enjoyment of present and future generations.

**Recommendation** - Form a coordinating council composed of state cabinet level officials, state and regional heads of federal agencies and selected local officials; the executive director of the Department of Natural Resources would be its chairman. This council should coordinate all major activities concerning the basin's natural resources.

### **16.4 Federal Programs and Projected Planning and Development**

The various federal agencies and their programs available are briefly described

below. Projected planning and implementation are also discussed.

#### **16.4.1 Agricultural Stabilization and Conservation Service**

To assure effective solutions to local conservation problems, the Agricultural Stabilization and Conservation (ASC) committees in Kane and Washington counties periodically meet with their respective County Program Development groups to identify the problems and develop conservation practices to solve them.

**Agricultural Conservation Program (ACP)** - The ACP is designed to help reduce soil erosion and water pollution, protect and improve productive farm and ranch land, conserve water used in agriculture, preserve and develop wildlife habitat and encourage energy conservation measures.

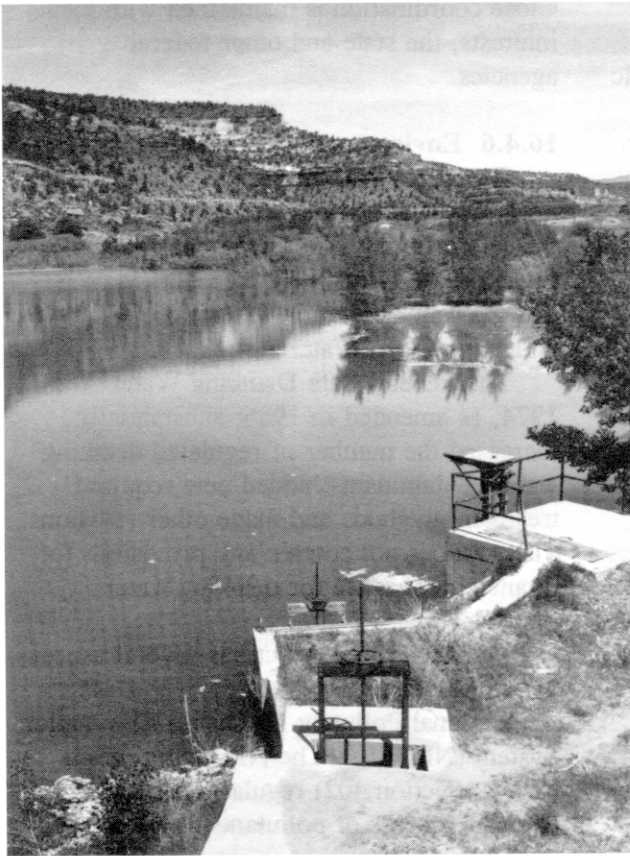
Only those practices that significantly contribute to these objectives, and are not required as a condition of receiving assistance through other federal programs, are eligible for cost-share assistance.

The ACP is administered by state and county committees working under the general direction of the Agricultural Stabilization and Conservation Service. The Soil Conservation Service, Forest Service and Utah Division of State Lands and Forestry are responsible for providing technical program guidance. The County Cooperative Extension Service provides educational support.

**Emergency Conservation Program (ECP)** - The ECP provides emergency cost-share funds to rehabilitate farmland damaged by wind erosion, floods or other natural disasters and for carrying out emergency water conservation measures during periods of severe drought.

Colorado River Salinity Control (CRSC) - The CRSC program applies to an eligible project area identified in a published U.S. Department of Agriculture salinity control report. The Moapa Valley Project in Nevada is currently included in the implementation.

Conservation Reserve Program (CRP) - The CRP was created in the Food Security Act. This program provides for removing highly erodible lands from production to protect them. It also promotes maintaining wetlands for wildlife habitat and water quality.



#### **16.4.2 Bureau of Indian Affairs**

The Bureau of Indian Affairs, under the trusteeship exercised by the Secretary of the Interior, works cooperatively with the Indian people and their tribal leaders toward assuring the most effective and productive use and development of their resources. Accordingly, the bureau is interested in development of water resources.

#### **16.4.3 Bureau of Land Management**

The Federal Land Policy and Management Act gives the Bureau of Land Management (BLM) authority for inventory and comprehensive planning for all public lands and resources under its jurisdiction. This includes water quality considerations, with the mandate to comply with applicable laws. This agency is also responsible for managing the existing and proposed wilderness areas.

The quantity and quality of water resources are key factors in managing all terrestrial and aquatic resources on public lands in the Cedar City District. Water resources are rapidly becoming a major determinant of resources management alternatives. BLM manages riparian habitats of streams, lakes, reservoirs and ponds to provide high-quality water resources for beneficial downstream uses.

Collection of water resources and water quality data is needed for all resources programs. The BLM is also responsible for planning the use of these resources on the public lands in coordination with the state and other agencies.

All of these data become a part of a resource management plan for a given area. Public input is requested at points in the process. This finally becomes the management plans for the resources on BLM administered land.

#### **16.4.4 Bureau of Reclamation**

Bureau of Reclamation programs for water resources can be placed into four broad categories: investigations, research, loans and service. All require close cooperation with the concerned entities.

Investigations Programs - General investigations, including an environmental assessment, are conducted for specific and multipurpose water resources projects. Water quality improvement programs (Public Law 93-320) are special investigations to control salinity levels in the Colorado River. The criteria for determining feasibility are set by the Colorado River Basin Salinity Control Forum, a committee composed of basin state representatives.

Research Programs - Reclamation conducts research on water-related design, construction, materials, atmospheric management and wind, geothermal and solar power. Most programs are conducted in cooperation with other entities in areas where opportunities exist for demonstrating future feasibility.

Loan Programs - Loan programs provide federal loans and assistance to qualified organizations wishing to construct or improve smaller and generally less complex water resources developments.

Service Programs - Intergovernmental service programs are specialized technical service programs designed to provide data, technical knowledge and expertise to states and local government agencies to help avoid

duplication of special service functions. Local governments pay for requested services.

#### **16.4.5 Corps of Engineers**

If local interests are unable to cope with a water resources problem, they may petition their representatives in Congress for assistance. This allows the Corps of Engineers (Corps) to investigate the economic and technical feasibility and environmental and social acceptability of remedial measures. When the directive covers an entire river basin, it is studied as a unit and a comprehensive plan is developed. Close coordination is maintained with local interests, the state and other federal agencies.

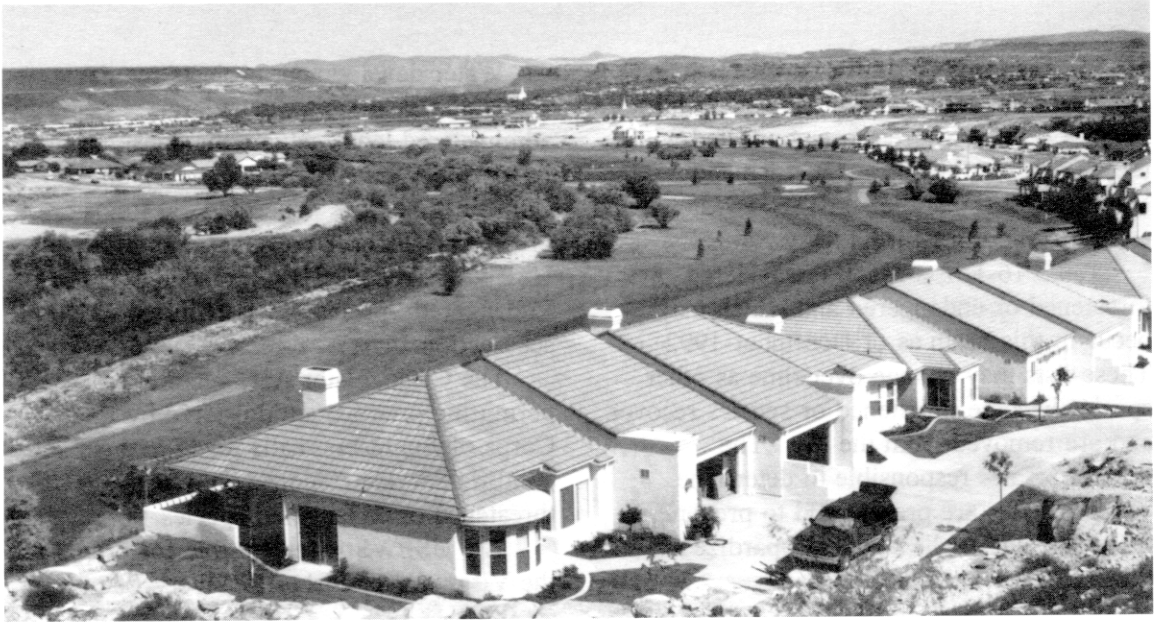
#### **16.4.6 Environmental Protection Agency**

Environmental Protection Agency (EPA) programs dealing with water resources are the safe drinking water program under the Federal Safe Drinking Water Act (SDWA) and the water pollution control program under the Clean Water Act (CWA).

The Federal Safe Drinking Water Act, 1974, as amended in 1986, substantially increased the number of regulated drinking water contaminants, added new required treatment methods and made other revisions. The act does not contain any provisions for financial assistance for drinking water systems.

The Clean Water Act has several aspects including:

National Pollutant Discharge Elimination System (NPDES) - The NPDES program (CWA, Section 402) regulates the discharge of point sources of pollutants to waters of the United States.



**Construction Grants** - This program provides grant funds for construction of needed municipal wastewater treatment facilities. This program was phased out in 1990 and replaced with a revolving loan fund managed by the state.

**Water Quality Management Planning and Non-point Source Pollution Control** - Section 205 (j) of the CWA provides funds to states to carry out water quality management planning. Section 319 of the CWA authorizes funding for implementation of non-point source pollution control measures under state leadership.

#### **16.4.7 Federal Emergency Management Agency**

Programs administered by the Federal Emergency Management Agency (FEMA) are related to disaster preparedness, assistance and mitigation. They can provide technical assistance, loans and grants.

**Presidential Declared Disaster** - After a presidential declaration of a major disaster,

usually after a state request, grants are available to state and local governments for mitigation of disaster-related damage.

**Assistance Grants** - The FEMA can provide grants on a matching basis to help the state develop and improve disaster preparedness plans and to develop effective state and local emergency management organizations. Also, grants are available to develop earthquake preparedness capabilities.

**Flood Plain Management** - The FEMA provides technical assistance to reduce potential flood losses through flood plain management. This includes flood hazard studies to delineate flood plains, advisory services to prepare and administer flood plain management ordinances and assistance in enrolling in the National Insurance Program. The FEMA can also assist with the acquisition of structures subject to continual flooding.

#### 16.4.8 Fish and Wildlife Service

Activities of the U.S. Fish and Wildlife Service (USFWS) are those connected with the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act and the Migratory Bird Treaty Act.

Table 16-1 lists species considered threatened or endangered and which may occur in this basin as of December 1992. These lists may change over time as other species become threatened or species recover and are removed from the list. The developers are responsible to determine which species are present and to prevent activities that might further jeopardize a given species or its habitat.

Water development projects requiring rights-of-way permits for federal administered lands actuate the consultation requirement under the Fish and Wildlife Coordination Act. When federal funds are involved, Section 7 consultation with the USFWS as required by the federal Endangered Species Act is required (Also see Section 14).

The Clean Water Act, Section 404 permitting process, administered by the Corps of Engineers, calls for U.S. Fish and Wildlife Service response on impacts to threatened or endangered species.

The USFWS is responsible for preparing the Virgin River Fishes Recovery Plan. A

TABLE 16-1 <sup>6,7</sup> THREATENED OR ENDANGERED SPECIES	
Bald eagle	Kanab ambersnail
Peregrine falcon	Welsh's milkweed
Woundfin minnow	Siler pincushion cactus
Virgin River chub	Dwarf bear-claw poppy
Desert tortoise	

There are no Category 1 species in the basin. Over 62 species are listed as Category 2. These lists are constantly changing to reflect existing conditions. Although some of these species are not aquatic in origin, water availability in southwestern Utah is important to them. That availability also affects the extent of human population growth that may encroach on the habitat of terrestrial species.

draft was published in October 1992. It was prepared by the Virgin River Fishes Recovery Team. This plan should be consulted prior to project development.

The Fish and Wildlife Service has the primary authority for enforcement of the protective elements of the Migratory Bird Treaty Act. The act prohibits the "take" of covered bird species. All birds (with the

exception of starlings, English sparrows and a few others) are protected under the Migratory Bird Treaty Act. The Endangered Species Act also prohibits "the taking" of a protected species.

Any unpermitted activity on any land that results in "take" of federally listed species constitutes violation of Section 9 of the Endangered Species Act. "Take" under the act is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In addition, "'harm' in the definition of 'take' in the act means actually killing or injuring wildlife. Such action may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering."

#### **16.4.9 Forest Service**

Water-related programs of the Forest Service include watershed management, special use authorization for water development projects and coordination with local, state and federal agencies. They also manage wilderness areas located on national forest lands.

Watershed Management - Watershed protection insures that activities do not cause undue soil erosion and stream sedimentation, reduce soil productivity or otherwise degrade water quality.

Water yields may be affected primarily through snowpack management as a result of timber harvest using well-planned layout and design. Potential increases may approach one-half acre-foot per acre for some treated areas, but multiple-use considerations and specific on-site conditions may limit actual increases.

Special Use Authorization - Construction and operation of reservoirs, conveyance ditches, hydropower developments and other water resources developments require special use authorization and usually require an annual fee. Authorization contains conditions necessary to protect all other resources use. Coordination of water developments by others requires communication early in the planning process to guarantee environmental concerns are addressed.

#### **16.4.10 Geological Survey**

The Geological Survey, through its Water Resources Division (WRD), investigates the occurrence, quantity, distribution and movement of surface water and groundwater and coordinates federal water data acquisition activities. This is accomplished through programs supported by the Geological Survey independent of, or in cooperation with, other federal and non-federal agencies.

The Geological Survey has recently completed a groundwater condition study in the upper Virgin River and Kanab Creek basins. Earlier, a similar study was completed in the central Virgin River area. A more comprehensive study is planned in the near future in Washington County. A reconnaissance groundwater study in the Beaver Dam Wash is underway. This study is sponsored by Arizona, Nevada and Utah and should be completed in 1995.

#### **16.4.11 National Park Service**

The National Park Service was established in 1916 to promote and regulate the use of national parks, monuments and similar reservations to "conserve the scenery and the natural historic objects and the



wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (39 Stat. 535; 16 U.S. Code 1).

The long-range objectives of the National Park Service are as follows:

1. To conserve and manage the parks for their highest purpose; the natural, historical and recreational resources.
2. To provide the highest quality of use and enjoyment by increased millions of visitors.
3. To develop the parks through inclusion of additional areas of scenic, scientific, historical and recreational value.
4. To communicate the cultural, natural, inspirational and recreational significance of the America heritage.

In fulfillment of these objectives, the National Park Service performs the following functions:

1. Manages the 142,300 acres in Zion National Park.
2. Conducts the recreation aspects of water project implementation studies.
3. Conducts Wild and Scenic River and National Historic and Scenic Trail studies authorized by Congress.
4. Through cooperative agreements, administers recreation on lands under the jurisdiction of other federal agencies.

5. Provides professional and administrative support to the national, regional and park advisory boards.

In federal water resources project pre-authorization studies, the National Park Service may provide technical assistance in general development planning. In post-authorization studies, it may provide technical assistance in development planning; site planning; consultation pertaining to the development, interpretation and operation of recreation areas; management planning; negotiation of agreements for administration of reservoir recreation areas and follow-up on the administration of such agreements.

#### **16.4.12 Soil Conservation Service**

Soil Conservation Service (SCS) authorities and programs are provided in the Soil and Domestic Allotment Act of 1935. This act calls for the development and implementation of a continuing program of soil and water conservation on all lands, regardless of ownership, when so requested. Over the years, additional programs have been added.

A soil survey has been completed in Washington County. One is currently underway in western Kane County.

The SCS snow survey program in the Kanab Creek/Virgin River Basin area makes and coordinates surveys and prepares forecasts of seasonal water supplies. This is a cooperative program with state and other federal agencies for the benefit of water users.

The Watershed Protection and Flood Prevention Act (Public Law 83-566), as amended, gives primary responsibility to SCS for small, upstream watershed activities. Construction on the Warner Draw

Watershed Project around St. George is almost complete. Before the project closes, two added features will be assessed. Planning is underway on the Muddy Creek Watershed near Orderville.

The Resource Conservation and Development (RC&D) program began with the Food and Agriculture Act of 1962 (Public Law 87-703), as amended. It provides assistance to government and

non-profit organizations in multiple-jurisdictional areas. The Kanab Creek/Virgin River Basin is located within the Color Country RC&D Project area.

The Emergency Watershed Program provides technical and financial assistance to relieve eminent hazards to life and property. These hazards include floods and products of erosion created by natural disasters causing sudden impairments. ■

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